IN THE CLAIMS

Please amend the claims as follows:

Claims 1-4 (Canceled).

Claim 5 (Currently Amended): An image reading apparatus, comprising:

photoelectrically converting means for photoelectrically converting image

information obtained from optically reading an original image, line by line, and outputting an

image signal, said photoelectrically converting means having optically shielding means

provided at a portion thereof; and

black shading correcting means for correcting the image signal using a black

reference level, said black reference level being obtained from said portion of said

photoelectrically converting means for each line during an operation of the reading of the

original image,

wherein the black reference level used by said black shading correcting means for

each line is obtained using black reference values, each of the black reference values being

data of said portion of said photoelectrically converting means for a respective one of a

plurality of lines,

wherein the black reference level is a moving average of the black reference values

for the plurality of lines,

wherein the black reference level for a respective line is an average of pixel values in

a main scan direction, the moving average being obtained from moving-averaging, in a sub-

scan direction, the black reference values.

Claim 6 (Canceled).

Claim 7 (Previously Presented): An image reading apparatus, comprising:

photoelectrically converting means for photoelectrically converting image information obtained from optically reading an original image, line by line, and outputting an image signal, said photoelectrically converting means having optically shielding means provided at a portion thereof; and

black shading correcting means for correcting the image signal using a black reference level, said black reference level being obtained from said portion of said photoelectrically converting means for each line during an operation of the reading of the original image,

wherein the black reference level used by said black shading correcting means for each line is obtained using black reference values, each of the black reference values being data of said portion of said photoelectrically converting means for a respective one of a plurality of lines,

wherein the black reference level for each line is obtained from moving-averaging the black reference values for the plurality of lines.

Claim 8 (Original): The image reading apparatus, as claimed in claim 7, wherein the plurality of lines comprise the current line and preceding lines.

Claims 9-12 (Canceled).

Claim 13 (Currently Amended): An image reading apparatus, comprising:

a photoelectric unit which photoelectrically converts image information obtained from optically reading an original image, line by line, and outputs an image signal, said photoelectric unit having an optically shielding member provided at a portion thereof; and

a black shading correcting unit which corrects the image signal using a black

reference level, said black reference level being obtained from said portion of said

photoelectric unit for each line during an operation of the reading of the original image,

wherein the black reference level is obtained using black reference values, each of the

black reference values being data of said portion of said photoelectrically converting means

for a respective one of the plurality of lines,

wherein the black reference level is a moving average of the black reference values

for the plurality of lines,

wherein the black reference value for a respective line is an average of pixel values in

a main scan direction, the moving average being obtained from moving-averaging, in a sub-

scan direction, the black reference values.

Claim 14 (Canceled).

Claim 15 (Previously Presented): An image reading apparatus, comprising:

a photoelectric unit which photoelectrically converts image information obtained from

optically reading an original image, line by line, and outputs an image signal, said

photoelectric unit having an optically shielding member provided at a portion thereof; and

a black shading correcting unit which corrects the image signal using a black

reference level, said black reference level being obtained from said portion of said

photoelectric unit for each line during an operation of the reading of the original image,

wherein the black reference level is obtained using black reference values, each of the

black reference values being data of said portion of said photoelectrically converting means

for a respective one of the plurality of lines,

wherein the black reference level for each line is obtained from moving-averaging the black reference values for the plurality of lines.

Claim 16 (Original): The image reading apparatus, as claimed in claim 15, wherein the plurality of lines comprise the current line and preceding lines.

Claim 17 (Previously Presented): The image reading apparatus as claimed in claim 5, wherein:

the moving-averaging comprises averaging data of a predetermined number of immediately antecedent lines, the data of each of the predetermined number of immediately antecedent lines comprising an average taken through a relevant line.

Claim 18 (Previously Presented): The image reading apparatus as claimed in claim 7, wherein:

the moving-averaging comprises averaging data of a predetermined number of immediately antecedent lines, the data of each of the predetermined number of immediately antecedent lines comprising an average taken through a relevant line.

Claim 19 (Previously Presented): The image reading apparatus as claimed in claim 13, wherein:

the moving-averaging comprises averaging data of a predetermined number of immediately antecedent lines, the data of each of the predetermined number of immediately antecedent lines comprising an average taken through a relevant line.

Claim 20 (Previously Presented): The image reading apparatus as claimed in claim

15, wherein:

the moving-averaging comprises averaging data of a predetermined number of

immediately antecedent lines, the data of each of the predetermined number of immediately

antecedent lines comprising an average taken through a relevant line.